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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/091,156	03/04/2002	John G. Amery	BOEI-1-1035	6022

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EXAMINER

PIZIALI, JEFFREY J

ART UNIT	PAPER NUMBER
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2673

DATE MAILED: 05/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/091,156

Applicant(s)

AMERY ET AL.

Examiner

Jeff Piziali

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 14 October 2004 has been entered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Independent claims 1, 11, and 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. The term "the operator perceives through the lens the displayed image as a far-focused virtual image" in claims 1, 11, and 21 is a relative term which renders the claim indefinite. The term "the operator perceives through the lens the displayed image as a far-focused virtual image" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Firstly, an artisan could not be reasonably apprised of what an operator

internally and personally perceives. For instance, a blind operator will perceive something completely different compared to a sighted operator. Secondly, an artisan would not be able to adequately appreciate what precisely constitutes a *far-focused virtual image*. At what distance threshold does a displayed virtual image go from being *far-focused* to *near-focused*, for instance?

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Teitel (US 5,999,147).

Regarding claim 1, Teitel discloses a visual display system for producing a display image perceived as a far-focused virtual image by an operator, the display system comprising: a video image generation system including an image generator for generating a video signal (see Column 3, Lines 43-63); a video display [Fig. 5; 20], operatively connected to the image generator, for displaying a video image based on the generated video signal; and a lens [Fig. 5; 32] having a focal length positioned between the operator [Fig. 5; 42] and the video display at a distance from the video display that is less than the focal length of the lens (see Fig. 2; Column 4, Lines 31-58), wherein the operator perceives through the lens the displayed image as a far-focused virtual image [Fig. 5; 62] (see Column 5, Line 54 - Column 6, Line 65).

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Regarding claim 2, Teitel discloses the lens is a positive aspheric lens (see Column 6, Lines 33-44).

Regarding claim 3, Teitel discloses the positive aspheric lens is a Fresnel type lens (see Column 6, Lines 54-65).

Regarding claim 4, Teitel discloses the lens is an achromatic lens (see Column 6, Line 66 - Column 7, Line 14).

Regarding claim 5, Teitel discloses the achromatic lens is a Fresnel type lens with color separation correction (see Column 6, Line 54 - Column 7, Line 14).

Regarding claim 6, Teitel discloses the lens has an associated focal length designed such that the displayed image viewed through the lens appears at a predetermined distance (see Column 6, Lines 1-32).

Regarding claim 7, Teitel discloses the lens includes a planar surface (see Fig. 5).

Regarding claim 8, Teitel discloses the lens is oriented substantially parallel to the video display and substantially perpendicular to a line extending from the operator's viewpoint (see Fig. 5).

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Regarding claim 9, Teitel discloses the lens is one or more optical elements for producing a substantially distortion-free, collimated image (see Column 6, Lines 33-65).

Regarding claim 10, Teitel discloses the video display includes a flat-panel display (see Column 3, Lines 25-36).

Regarding claim 11, this claim is rejected by the reasoning applied in the above rejection of claim 1.

Regarding claim 12, this claim is rejected by the reasoning applied in the above rejection of claim 6.

Regarding claim 13, this claim is rejected by the reasoning applied in the above rejection of claim 7.

Regarding claim 14, this claim is rejected by the reasoning applied in the above rejection of claim 8.

Regarding claim 15, this claim is rejected by the reasoning applied in the above rejection of claim 2.

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Regarding claim 16, this claim is rejected by the reasoning applied in the above rejection of claim 3.

Regarding claim 17, this claim is rejected by the reasoning applied in the above rejection of claim 4.

Regarding claim 18, this claim is rejected by the reasoning applied in the above rejection of claim 5.

Regarding claim 19, this claim is rejected by the reasoning applied in the above rejection of claim 9.

Regarding claim 20, this claim is rejected by the reasoning applied in the above rejection of claim 10.

Regarding claim 21, this claim is rejected by the reasoning applied in the above rejection of claims 1, 4, 6, and 7.

Regarding claim 22, this claim is rejected by the reasoning applied in the above rejection of claim 8.

Regarding claim 23, this claim is rejected by the reasoning applied in the above rejection of claim 5.

Regarding claim 24, this claim is rejected by the reasoning applied in the above rejection of claim 10.

Response to Arguments

7. Applicants' arguments filed 14 October 2004 have been fully considered but they are not persuasive. The applicants contend the cited prior art of Teitel (US 5,999,147) neglects to disclose a lens having a focal length positioned between the operator and the video display at a distance from the video display that is less than the focal length of the lens. The examiner must respectfully disagree. Teitel explicitly teaches a lens [Fig. 5, 32 and Fig. 2, 30 & 32] having a focal length ("*a preferred focal length of about 60 mm*" -- see Column 5, Line 28) positioned between the operator [Fig. 5; 42] and the video display [Fig. 5; 20] at a distance ("*about 30 mm*" -- see Column 5, Line 47) from the video display that is less than the focal length of the lens, wherein the operator perceives through the lens the displayed image as a far-focused virtual image [Fig. 5; 62] (see Column 5, Line 54 - Column 6, Line 65). Wherein the video display must inherently exist at a distance from the video display (i.e. itself) that is less than the focal length of the lens. And wherein Teitel's operator would inherently be positioned at a distance from the display less than the lens' focal length whenever the operator merely leans forward close enough to the display (for instance, for the purpose of inspecting the display for dust

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accumulation, or alternately, simply wiping the display clean with a thumb). By such reasoning, rejection of the claims is deemed necessary, proper, and thereby maintained at this time.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff Piziali whose telephone number is (571) 272-7678. The examiner can normally be reached on Monday - Friday (6:30AM - 3PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on (571) 272-7681. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



26 April 2005



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